

RAGCHEW

The official newsletter of the Cape Town Amateur Radio Centre
July-August 2010



CHAIRMAN'S CHAT

by Shaun Overmeyer ZS1RA



Hi All

This is the last rant you will have from me in the Ragchew. As I have mentioned in the last few columns I will not be available to stand as Chairman again for the coming year. I was contemplating becoming philosophical and pontificating about the end of my innings but I thought better of it and decided to keep this short. I am sure that with a new Chairperson we will

have a fresh look at things which is always good as change is the sure way to grow.

We have a nominee who has already put up his hand to assist and manage the Lighthouse weekend for the Club in Rob Bareham – ZS1SA. Not only has Rob taken on this task but he has agreed to be nominated to serve on the CTARC Committee. To my knowledge we have not received many nominations so if you wish to assist please let our Secretary, Peter, know and we can arrange for your nomination.

One of the highlights of the AGM to my mind is the awarding of trophies. We need some nominations for the various trophies. If you know one of your peers who deserves an award please send the names urgently as we will be meeting soon to make the final decisions on these matters.

We made special arrangements to move the AGM as it clashed with the RTA, we also moved the AGM to the afternoon in order to accommodate those who find it difficult to drive at night. All of this to ensure that we have the best turnout possible. Please try to be there.

Finally I would like to thank the membership for the support and confidence shown in me. It has been an absolute pleasure to serve you a task made easy with the best committee I have ever worked with.

See you all at the AGM.

Best 73
Shaun ZS1RA

In this edition

Chairman's chat	1
Secretary's report	2
Club notices	3
Other avenues to explore	4
Announcements & Smalls	5

SECRETARY'S REPORT

by Peter Henochsberg ZS1PMH



ANNUAL GENERAL MEETING

The AGM of the CTARC will take place on Saturday 31st July 2010 at 14:00 at the clubhouse. Please join us for the meeting and stay afterwards for a light snack and other liquid refreshments.

It is not too late to nominate club members for awards. You can also give someone your proxy, if you are unable to attend the AGM and, of course, you can nominate someone to serve on the committee – or even volunteer to serve.

Please refer to the AGM announcement pack for the appropriate form that needs to be completed and returned.

ANNUAL SUBSCRIPTION NOW DUE

Your annual fee became due on 1st July. The fee this year is R85 for ordinary membership and R70 for pensioners. Of course, any extra contributions to the club would be greatly appreciated.

There has been a reasonable response to our first calls for fee payment and we urge all members to please pay their fee as soon as possible. You will have received the membership form with the AGM notice bundle. Our banking details are at the bottom of the form, should you wish to do an EFT payment.

INTERNATIONAL LIGHTHOUSE WEEKEND

In August the club will be participating in the ILW under the coordination of ZS1SA – Rob Bareham. The club will soon be purchasing some much needed good quality coax cable. In the past we have had to borrow cable and have used the scrappy stuff that we have lying around. We have decided to go for 100m of mill-spec RG213. This should do the trick. Rob is also in the process of gathering together and sorting all the equipment needed. This is bound to make the event both enjoyable and successful.

Thanks Rob.

WORK PARTY

In preparation for the ILW and also to effect a repair to our Force 12 beam which got some wind damage and lost a radial, a work party was held at the club house on 24th July. The day's work was very productive and successful. We wish to thank all those we attended and helped out.

FINANCIAL MATTERS

A detailed financial report was sent out to you recently in preparation of the AGM. Our financial position has not changed since then. As mentioned, the next large expenditure, approximately R1500, will be for purchase of coax cable and some other small items that are needed for the ILW.

SALE OF ESTATE ITEMS

I have been approached by Ruth Jackson, the widow of the SK Peter ZS1MWH to dispose of his shack equipment. There are some nice items in the shack, but difficult to price due to age. I have thus suggested a 'secret bid' system for the equipment. I will send out a bidding form shortly, but the equipment will be available for view at the AGM.

TAKING A BOW

This will be the final secretary/treasurer's report that I publish in *Ragchew*. After eight years of holding the portfolios on the committee, I am not available for re-election at the AGM. I have before – and do so again – pay tribute to the exceptional committee of the CTARC. They do a fantastic job for the club and it is often unseen, unacknowledged and thankless. We owe all of them a debt of gratitude. I wish also to thank you, the members, for doing what you can to help the club, whether this has come in the form of simply paying dues on time, or making a donation, or helping out at events – every little bit helps. I am honoured and proud to be able to call a number of members my friends. This friendship would not have developed without the medium of our mutual hobby. Thank you and goodbye. This is the secretary/treasurer signing off and going QRT!

Hope to see you at the AGM and to catch you down the coax.

73 - Peter

Club Contact Details

You can call the chairman Shaun – ZS1RA on 083 462 5695
The Secretary/Treasurer Peter – ZS1PMH can be reached on 021-572-0329 (NB – new land line number) or 082 925 2298

Please note that there will be a new chairman, a new secretary and a new treasurer after 31st July 2010.

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NEXT CLUB MEETING

2010 ANNUAL GENERAL MEETING

This is a public notice calling the 2010 Annual General Meeting of the
Cape Town Amateur Radio Centre

Date: Saturday 31st July 2010
Time: 14:00
Venue: CTARC Club House

Please join us at the meeting and for a light meal and refreshments afterwards.



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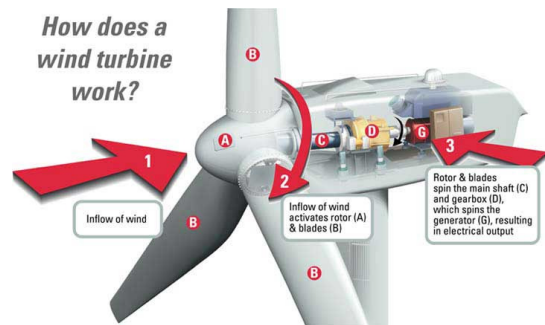
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OTHER AVENUES TO EXPLORE - by Dave Reece ZS1DFR



Welcome to the last issue of Ragchew for the CTARC year. Our AGM follows very shortly, and the next Ragchew after that. This time I want to talk generally about wind energy generation. The first thing to say is that wind energy is difficult to use efficiently. That's because wind tends to vary in speed and direction. Too much wind can damage a turbine and too little will not produce enough power to use, so control and usage can be difficult. Professionally built wind turbines have governors or variable pitch control to prevent too much wind from overdriving the turbine! Not an easy thing to assemble as an amateur energy gatherer.

To get a constant source of energy from the wind, one needs a decent height above ground for the turbine, perhaps about 20 to 25 meters above ground, and level ground around your site to try to guarantee a consistent source of airflow. Interestingly, the power generated increases with the cube of the wind velocity. That means an increase in wind speed from 20 to 25Kph would double the power output, and power output would quadruple if wind speed increases from 10 to 16Kph! By the time the wind speed is about 40Kph, the turbine is in danger of being destroyed. Very narrow margins to work with, indeed!



Turbines can have horizontal axles or vertical axles, the horizontal needing a pointing system to catch the wind, the vertical receiving wind from all direction. Horizontal 3 bladed turbines are the most efficient at catching energy in reasonable wind-speeds, but do need a governor to stop being overdriven by the wind. More blades on the rotor tend to cause turbulence to the blade following them, and reduce the efficiency of the turbine. Two bladed turbines are more efficient in very high wind speeds, obviously because there is more time for turbulence behind a blade to dissipate before the next blade enters the region.

The next thing to consider is a means to control the power generated so as not to overload the load, whether it be a battery storage system, or a dynamic system. Remember that the system or batteries act as a load (brake), so you can't cut the supply from the turbine if the system is oversupplied, because the turbine will over-rotate. The brushes (or equivalent components) will arc and burn the armature. You can't use the same charge controller as in a solar system. These simply switch off the charge, reduce the load and allow the turbine to spin too fast. So, electronic packages convert the power into usable, stable energy and the load stays connected to the turbine.



Darling wind farm

Now, I don't know about you, but all these points I've mentioned add up to too much PT for my liking, so I think you'll agree that wind power is a rather romantic notion, but really unlikely to provide you with an efficient supply!

Changing the subject slightly, I'll touch on water power. Very few of you will have flowing water on your premises to catch the energy. However, if you do, you'll need either a large flow and not much head of water pressure or else a large head of pressure (read: height the water drops)

and not much water volume, to drive a water-mill constantly enough to generate the energy. Interestingly, water pressure can actually provide enormous quantities of energy, more in fact than inconsistent wind power! But there's a lot of maintenance necessary, because you need to keep the flow clean and going strongly, so debris has to be cleaned out regularly.

Perhaps the final piece of advice to give you all, is to say that any system you decide to implement should include more than one back-up system, to allow for failure or variable weather/cloud/rain/wind/dry rivers/etc. Battery back-up is most often used, but you should probably have a small generator to keep the batteries going if grid power stays down for prolonged periods. That in turn means sufficient fuel in storage to keep the generator happy, which brings us back to the start of the discussion on alternate power sources.

The next subject will be to decide what items you're going to prioritise for supply when/if the power drops out. See you in the next edition of Ragchew!

Best wishes. Dave ZS1DFR

ANNOUNCEMENTS

BIRTHDAY WISHES



To all our club members who celebrate their birthdays in the coming month, may your special day herald a fantastic year ahead and bring you all that you would wish for yourself and lots of good signal reports.

26-Jul	ZS1CL	Tippy Marais
03-Aug	ZS6BMF	Paul Sterling
06-Aug	ZS1FP	Mike Schumann
11-Aug	ZS1PE	Mike Howell
26-Aug	ZS1IKB	Ian Basset
27-Aug	ZS1TX	Chris Muller

SMALLS

If you have anything to advertise, please send your Smalls – either Wanted to Surplus to Requirements – to zs1ct@ctarc.org.za